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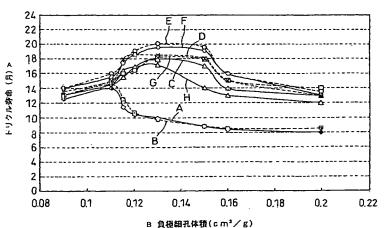
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[続葉有]

(54) Title: CONTROL VALVE TYPE LEAD BATTERY

(54) 発明の名称: 制御弁式鉛蓄電池



- A...TRICKLE LIFETIME (MONTH)
- B...VOLUME OF PORES IN NEGATIVE ELECTRODE (CM3/G)

(57) Abstract: A control valve type lead battery comprising an electrode plate group consisting of positive electrode plates each including a positive electrode current collector composed of a lead alloy containing Sn and a positive electrode active substance held on the positive electrode current collector, negative electrode plates each including negative electrode current collector composed of a lead alloy and a negative electrode active substance held on the negative electrode current collector, and separators, and electrolyte impregnated into the electrode plate group, wherein the content of Sn in the positive electrode current collector is 1.1-3.0 mass% and the volume of pores per unit mass of the negative electrode active substance is 0.115-0.150 cm³/g. With such an arrangement, the negative electrode plate exhibits a stabilized oxygen absorption power and corrosion of the current collector in the positive electrode plate is suppressed resulting in a control valve type lead battery having a stabilized long lifetime.

(57)要約: 本発明の制御弁式鉛蓄電池は、Snを含有した鉛合金からなる正極集電体および前記正極集電体に保持された正極活物質を含む正極板と、鉛合金からなる負極集電体および前記負極集電体に保持された負極活物質を 含む負極板と、セパレータとからなる極板群、ならびに前記極板群に含浸保持された電解液を具備し、 前記正極 集電体にお



INTERNATIONAL SEARCH REPORT

International application No. PCT/JP03/07521

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl ⁷ H01M10/06, 4/14, 4/68, C22C11/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) Int.Cl ⁷ HO1M10/06, 4/14, 4/68, C22C11/00		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922–1996 Toroku Jitsuyo Shinan Koho 1994–2003 Kokai Jitsuyo Shinan Koho 1971–2003 Jitsuyo Shinan Toroku Koho 1996–2003		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category* Citation of document, with indication, where	appropriate, of the relevant passages	Relevant to claim No.
X JP 8-339819 A (Matsushita Y Co., Ltd.), 24 December, 1996 (24.12.96 Claims; Par. Nos. [0015], [(Family: none)		1,2
<pre>Y JP 61-80769 A (Shin-Kobe E Ltd.), 24 April, 1986 (24.04.86), Claims; Fig. 1 (Family: none)</pre>	24 April, 1986 (24.04.86), Claims; Fig. 1	
A JP 10-302783 A (Shin-Kobe Ltd.), 13 November, 1998 (13.11.98 (Family: none)		1-3
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means "P" document published prior to the international filing date but later than the priority date claimed	combination being obvious to a person "&" document member of the same patent f	n skilled in the art family
Date of the actual completion of the international search 08 September, 2003 (08.09.03)	Date of mailing of the international search report 16 September, 2003 (16.09.03)	
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